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ABSTRACT

Temporal orientation may be defined as a central aspect of identity that pertains to the individual's unique interpretation of the life course. As a component of identity, temporal orientation should be affected by social contextual variables. Temporal orientation was assessed in a random sample of 94 men and women aged 24-61 years. Respondents were requested to "draw your life" as part of a 3-hour identity-life history interview. Markers were not pre-defined for age, nor was there a vertical axis specified, permitting respondents freedom to construct their own time referents and evaluative criteria. Four dimensions of temporal orientation were defined: time concept as linear or spatial; temporal perspective; content of most significant life event; and cognitive-affective evaluation of the life course as a global entity. Age alone had no significant effects when social contextual variables were evaluated. Women tended to be more present- and past-oriented than men, who exhibited greater future orientation. These effects were mediated by occupational prestige among men and homemaker versus employed working status among women. Affective descriptions of life course events also varied by sex and social status. The findings suggest that age is not related to the dimensions of temporal orientation. (Author/NRB)

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Pictorial Representations of the Life Course[1]

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The study of temporal orientation is instructive for what it reveals about the self's construction of meaning, the interpretation of life events, and assessment of control over future life possibilities. In this sense, temporal orientation may be considered to be a central aspect of identity as it pertains to the individual's unique interpretation of the life course.

Dimensions of Temporal Orientation

Temporal orientation includes a number of dimensions. First is the individual's conceptualization of personal time over the life course, seen as a totality. Second, and probably the most widely studied, is the dimension of temporal perspective; the general orientation to past, present, or future. Third, related to temporal perspective is the dimension of content: the areas of experience or the life events that are selected as important in characterizing past, present, or future as primary. Finally, there is an evaluative dimension, which describes the affect attached to recalled and projected events. In the present research, these dimensions were assessed by asking respondents to "draw your life" on a sheet of paper with only a horizontal line at the bottom.

Concepts of Time. The issue of alternative conceptions of time as cyclical or linear has dominated the literature on the social and historical meaning of time (Whitrow, 1972). The cyclical model holds that time is made up of discontinuous, qualitative units, and that events repeat themselves. The metaphor of the life course that corresponds to this conceptualization is that of the seasons, of a repetitive and natural sequencing of predictable events. Periods of the life course are evaluated subjectively, and hence are perceived by the individual who has experienced these events as unequal in proportion to their impact.

They are also seen as discontinuous. As applied to the life course, Cottle's (1976) term "spatial" to imply a cyclical model, seems more appropriate, since one's life cannot repeat itself in truly cyclical fashion. In contrast, the linear model suggests "time's arrow"; that time is made up of continuous, quantitative units, and that an event, once it has occurred, has escaped from one's grasp. Time in one's own life is seen as "flying by"; it cannot be caught or held. It follows that aging would thus be viewed negatively. The assumption that many people do view age in this fashion has given gerontologists reason to become interested in this issue (Kuhlen & Monge, 1958).

Temporal Perspective. Temporal perspective has been of interest to researchers studying adolescence, concerned with young people's abilities to plan ahead and delay gratification. It has also been of concern to gerontologists, because the assumption that time "runs out" for the older individual leads to the hypothesis that older adults will focus less on the future and more on the past or present. Hendricks and Hendricks (1975), in their review of the temporal perspective literature, concluded that evidence on age differences is inconclusive, due to the many forms of subjective meanings of time. It does not appear that older persons underestimate clock time (Salthouse, Wright, and Ellis, 1979). Thus, it is not clear that temporal perspective necessarily differs across age groups of adults. Nevertheless, temporal perspective appears to have importance as a mediating variable in adaptation to life events in adulthood (Lowenthal, Thurnher, and Chiriboga, 1975).

Temporal Content. The content of recalled or anticipated time reveals much about the substance of experience that makes a particular

time period important. What is it about the present that causes some adults to focus on it, while others emphasize the past? Generally, areas of experience and significant life events are studied outside the framework of temporal orientation, and temporal orientation is rarely studied in terms of life events. In life event research, the content of life events is not usually evaluated specifically. Instead, life events are summed according to the degree of stress into an index (Masuda and Holmes, 1978). While Neugarten's work (Neugarten, Moore, and Lowe, 1965) on "on-time" and "off-time" age-related markers is well known, there appears to be only one study which examines the content of the periods as a dimension of temporal perspective (Schmidt, Lamm, and Trommsdorff, 1978).

Evaluation. Researchers on the perception of life events and temporal perspective have referred to the affect associated with particular periods (cf. Chiriboga, 1977), or the value assigned to the availability of time (Morganti, Heiman, Licht, and Nehrke, 1981). Although the life graph is claimed to be a "projective technique" (Back and Bourque, 1980, p. 669), it is constrained to the extent that the respondent uses an experimenter-based evaluative dimension. In the present research, respondents were allowed to devise spontaneously their own evaluative criteria.

Temporal Orientation and Social Context

If it is assumed that temporal orientation is a component of identity, and if it is assumed further that identity is constructed and maintained in interaction with the social context (Bengston, Kasschau, & Ragen, 1977; Berger and Luckmann, 1966; Whitbourne and Weinstock, 1979), then it follows that temporal orientation is affected by social contextual variables.

A number of previous studies have addressed the relationships among temporal orientation and social class, and several have considered the effects of age and sex. Examination of these findings points to the need to explore further the individual and joint effects of social contextual variables upon temporal orientation.

Social Class. A number of studies have addressed the relationship between temporal orientation and social class. Most of these have found a positive relation to exist between social class and future orientation (Brim and Forer, 1956; Heckhausen, 1967; Koenig, 1980; Koenig, Swanson, and Harter, 1980; LeShan, 1952; and Schmidt et al, 1978). It should be noted that in at least one study, a class difference in future orientation was not established (Hudson and Tuttle, 1969), and the statistical foundation for the conclusion of LeShan's early and widely cited study has been called into question (Greene and Roberts, 1961). Cottle and Pleck (1969) did not find a relationship between class and time orientation, but the range of socioeconomic levels they studied was restricted to an unusually high range and hence is not fully comparable. Apart from the small number of negative findings, the general consistency of the finding of a class effect is impressive. None of these studies includes more than speculation about why a relationship between class and temporal orientation should exist, although such speculation points to ground for further research if knowledge in this area is to move beyond the level of descriptive correlations.

There are several plausible explanations for the relationship between social class and temporal orientation. First, it has been speculated that one component of standard SES measures, occupational prestige, is related

to material rewards. Since material resources make realistic future planning seem to be a worthwhile endeavor, this increases future orientation. A second hypothesis is that educational level, a second component of SES indices, is positively related both to the development of a cognitive set toward the future, and to the high valuation of the future. A third hypothesis focuses on the actual work activity associated with specific jobs. Kohn and Schooler (1973; 1978) with men, and Miller, Kohn, Schooler, and Miller (1980) with women have used work task functions derived from the Dictionary of Occupational Titles (DOT (1977) to document effects of work complexity on subsequent cognitive development. In occupations with higher-level work task functions (synthesizing, coordinating, mentoring, negotiating, preparing), planning for the future may be more a part of the daily routine than in occupations which involve repetitive sequences of manual activity. Finally it may be hypothesized that a social class effect is mediated through a life-style difference related to geographic mobility. Here it is implicit that occupational prestige is related to a necessity or willingness to move geographically, and is inversely related to a sense of localism and self-anchoring in a specific geographic location which contains many ties to the past.

Sex. In comparison to numerous studies on class effects, the scant empirical attention given to sex differences is striking. Only two studies have included an investigation of this variable: Schmidt et al. (1978) and Cottle (1976). Both of these studies provide support for the hypothesis that men are more future-oriented than women. In addition, Cottle (1976) observed that men viewed time as more discontinuous ("spatial") than

did women. These sex differences are attributed to socialization processes in early childhood and later experiences in adulthood. However, these studies have not included comparisons between working and non-working women, or family-and work-oriented men, which would provide a critical test of the hypotheseis that the relationship is due to differences in activities based on sex roles, or sex role socialization.

Age. The previously-cited review of work on the relationship of age to temporal perspective and subjective time passage includes relatively few studies on adults in the "middle years" between early adulthood and old age. Research on subjective evaluations of the life course and adaptation to life events typically includes a broad spectrum of ages, but as already noted, does not include treatment of these issues in terms of temporal orientation. Other researchers have investigated the age phases of adult life among adults in their 30's, 40's, and 50's (Frenkel-Brunswik, 1936; Gould, 1978; Levinson et al., 1977; and Vaillant, 1978). However in these studies, age is used to define temporal periods which are assumed to have an invariance across adults, and variations in time perceptions are not addressed. Moreover, in many of the studies on age, the effects of sex and social class are often not evaluated.

The Present Research

The method of assessing temporal orientation used in this study is a combination of the life graph technique (Bourque and Back, 1977), the "lines" test (Cottle, 1976), and the lifeline method (Sanguiliano, 1980). Except for its potential to suggest a linear as compared to a cyclical time concept, it presents the respondent with almost complete

freedom to define time periods over the life course and to project unique evaluations onto particular intervals. The measures derived from the life drawing fall into the four general categories of time concept, temporal perspective, content, and evaluation. These variables were studied in relation to the social contextual variables of age, sex, and mobility. Within the female sample, the distinction was made between homemakers and full-time employed; within the male sample, occupational status was used as the measure of social class.

It was expected that men would draw their lives in spatial rather than linear terms, that they would be more present- as compared to past-oriented, and more future- as compared to past- or present-oriented. The content of their life drawings was expected to pertain more to work than family, and to be evaluated in neutral as compared to affective or expressive terms. Females were expected tc draw their lives in a linear, or continuous fashion, and to be past- or present-oriented. The life events they cited were expected to concern family rather than work-related events, and to be relatively expressive. Mobility was expected to relate negatively to past orientation. Occupational status was expected to modify the pattern of results for men and working status to affect the pattern of findings for women. The effects of age were independently assessed; when differences according to age were found, it was subsequently used as a control variable in evaluating the effects of the other factors. It was expected that age alone would not be related to the temporal dimensions studied.

Method

Sample

A stratified random sample of 94 adults living in the city of Rochester, New York and its immediate suburbs was obtained through telephone directory listings. Potential participants received a letter explaining the purpose and procedures of the study, indicating that they would be paid $20.00 for a two to three hour interview covering life history and present identity if they qualified in terms of the age, sex and occupational distribution. They were told to expect a follow-up telephone call. The refusal rate was 25% (67 out of 274). The sample design called for equal numbers of males and females in each of 8 age by SES categories: 24-29; 30-39; 40-49; and 50-59; equally divided into lower-middle and upper-middle SES groups. The average age of the 47 women in the sample was 41.68; for the 47 men, 39.66. For the purpose of the present research, the female sample was divided into homemakers and full-time employed (outside the home). There were 19 homemakers, with an average age of 35.32, ranging from 26 to 55, and 28 workers with an average age of 42.29, ranging from 26 to 61. This age difference was not significant, t (45) = 1.90 $p. > 05$. The male sample was divided according to occupational prestige score (Hollingshead, Note 1) into non-professional (clerical workers and below) and professional (technical workers and above). The 23 non-professional workers ranged in age from 25 to 60, with a mean age of 41.46, and the 24 professional workers ranged from 24 to 60, with a mean age of 36.20. There was a significant age difference between these two groups, t (45) = 2.33, $p. < .05$.

Procedure

The life drawing was administered as a portion of the overall interview process. After completion of the identity interview, the respondent was shown an 8½ X 11" sheet of white paper (turned sideways) with a horizontal reference line extending 23 cm. 44 mm. above the bottom. The line was labeled below "Year and/or Age." At the top of the page (horizontally), 23 mm. below the upper edge, were the words "Draw your Life." The following instructions were read to the respondent:

> First of all, I'd like to ask you to take this sheet of paper and 'draw your life' on it, however you would like to, in whatever way you think best represents your life. Then I'd like for you to mark it off into segments that you personally consider to represent important eras or epochs or periods that you have lived through.

Subsequent to the respondent's initial depiction, the interviewer requested that each residential move be indicated on the page so that its timing could be easily calculated. A 1- to 2-hour interview based on the life drawing was then administered with semi-structured questions designed to elicit major life periods and the internal and external factors in existence during each of those periods. Following this interview, the respondent was asked to complete a Biographical Data Form, containing questions about the respondent and his or her educational, occupational, and family background.

Scoring of Temporal Variables

Life Time Concept. The overall form of the drawing was determined by

visual inspection. Since the forms were easily discernible, each drawing was categorized by only one judge. Drawings could be categorized as either segmented blocks or continuous linear forms. Within this broad dichotomy, two block forms and three linear forms were identified: (a) blocks formed by vertical lines perpendicular to the horizontal reference line; (b) blocks formed by vertical lines as in (a) but with a continuous line in a horizontal direction running across the segments; (c) continuous line in a horizontal direction; (d) written or pictorial markings directly along the bottom reference line; and (e) writing in a vertical direction.

Temporal Orientation. Orientation toward past, present, or future was assessed using several measures. The first was past versus present as a time of "peak period" in the life drawing. Peak period was that portion of the life drawing which was given the most disproportionate emphasis in terms of relative size. It was assumed that the relative size of time segments was an indication of the importance of the events that occurred during that interval. If a 30-year old depicted a three year period (10% of age) as 69 mm. long (30% of the reference line), it would be inferred that the event which took place during that time had special significance. The largest such period for each respondent was categorized as past or present, and its content analyzed for the Temporal Content measure (see below).

The second temporal orientation measure was determined from the total span of years represented in the life drawing. If the line extended past the respondent's present age, the respondent was categorized as future oriented, and present oriented if the line stopped at or before the respondent's present age.

For people over 40, a third measure of temporal orientation was derived. The percentage of respondents who chose a given year as a marker event was originally analyzed with the intention of trying to determine if intervals comparable to those identified by researchers interested in age phases would be found. It became apparent that not all respondents marked years past the age of 28 or 30, or marriage or childbirth (depending on which occurred later). Those respondents who did not mark years past that time and into the present were considered to be more past oriented than those who marked years off continuously throughout the adult years.

Temporal Content. The nature of the event which was described for the peak period was categorized as pertaining to: (a) family; (b) work, school, or armed services; (c) independence, self-development, or recreation; (d) childhood. Where the present was the peak period and was referred to only as "present", the content was determined from the identity interview, in which the respondent is asked to indicate the most important area of his or her life at the present time. In some cases, classification into one category was not possible, and the period was coded as (e) mixed.

Evaluation. Early in the present research, it became apparent that satisfaction was not the predominant mode of describing life events, but was only one of several forms of labeling the age or year markers associated with life events. Other forms of description were straightforward and matter-of-fact, such as "college", "marriage", "first child", and so on. These descriptions contained no reference to feeling states. Another group of descriptors included some affective statements of details adding an individual "stamp" to the event. An example of one of these is "raised

my son Charlie and sent him to school." A third category included descriptions of affective states; for example, "I was pushed around by my mother and finally rebelled." Finally, the fourth group was composed of terse, almost cryptic, and totally idiosyncratic phrases whose meaning was not at all clear. Unlike the other categories, there was no sense of timing or sequence inherent in them. An example of such a sequence is: "good times school church sing". In categorizing the life drawings according to these criteria, it became apparent that individuals possessed differing styles of describing the events on the life drawing, so that the categories could be applied to the group of events as a whole, rather than calculating percents in each category for each respondent's events. The reliability of this system was determined by having two raters score each respondent's set of life event descriptors. The agreement rate was 83.33%, corresponding to a kappa coefficient of .79 (Cohen, 1969). Disagreements were resolved by consensus. The high degree of reliability and the striking nature of the differences among the four styles suggests that this categorization system was tapping an underlying dimension of the description of life events not simply described in terms of satisfaction.

Scoring of Social Context Variables

Socioeconomic status was scored accoring to Hollinghead's (Note 1) four factor index, using the education and occupational prestige scales. Family socioeconomic status was not based on the average of husband's and wife's scores; instead, both scores were used. The Dictionary of Occupational Titles (1977) was used to classify work task functions of men and working women. Mobility was scored according to number of moves after the age of 18 years.

Results

The effects of social context on temporal orientation were evaluated using various rating systems for occupation. Occupational prestige for men (Hollingshead, Note 1) provided the most interpretable set of findings. This variable was dichotomized between levels 5 and 6, so that the lower rating included non-professional workers, and the higher rating was applied to workers considered to be likely to have a professional orientation. Age was dichotomized at 40, and mobility at less than 4 or 5 or more moves. Those results which were significant and interpretable are presented here. Since the analyses were of bivariate relationships, chi-squares were performed for as many breakdowns as permissible by cell sizes.

Life Time Concept.

There were no age or sex differences in the distribution of block versus linear shapes of life drawings. Within the male sample, professionals were more likely to draw their lives in block or segmented fashion, while non-professionals used one of the linear modes, as can be seen in Table 1, $\underline{X}^2(1) = 3.70$, $p < .05$.

Insert Table 1 about here

Temporal Perspective

Timing of Peak Period. As can be seen from Table 2, respondents under 40 years of age were more likely to be present-oriented, while the over-40 year olds were more likely to be past oriented, $\underline{X}^2\ (1) = 8.63$, $p < .01$. This was due primarily to the distribution of men by age, $\underline{X}^2(1) = 6.76$, $p < .01$,

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Insert Table 2 about here

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since the distribution for women by age was not significant. Moreover, among the men, mobility also seemed to be related to timing of the peak period, independently of age. The total distribution of men by mobility status can be seen in Table 3. Men who moved 5 or more times since the age of 18 were

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Insert Table 3 about here

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more likely to be present-oriented, while those who moved 4 or less times were likely to be past-oriented, $X^2(1) = 3.70$, $p < .05$.

Among women, there was a tendency for timing of peak period to be related to work status, as can be seen from Table 4. Although the chi-square was not

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Insert Table 4 about here

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significant, the Q-statistic did reveal a fair degree of association (.43). Thus, proportionately more workers than homemakers focused on the present rather than on the past. This pattern held up when age was controlled, although it was stronger for the over-40 group (Q = .60) than for the under-40 group (Q = .40).

Total Span. The distribution of span of life represented in the life drawing by sex is shown in Table 5. Men were more likely than women to include extension of the time line into the future than were women, $X^2(1) = 5.98$, $p < .025$. Within the female sample, among those under 40, all homemakers ended their time lines at the present, while nearly half of the working women (42%) drew an extension into the future. Thus, while a considerable number of working women under 40 were present oriented, a larger number were future oriented than their age peers who were not employed outside the home, $X^2(1) = 5.39$, $p < .25$.

Distribution of Event Markers. Among respondents over 40 years of age,

men and women differed in placement of event markers after the late 20's, as can be seen in Table 6, $X^2(1) = 4.78$, $p < .05$. Moreover, among the female sample,

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Insert Table 6 about here

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homemakers were less likely (54.17%) than working women (85.00%) to extend events into the adult years, $X^2(1) = 4.03$, $p < .05$.

Temporal Content

Analysis of the distribution of content of the peak period revealed a significant relationship to sex, $X^2(2) = 11.86$, $p < .003$, as can be seen in Table 7. This relationship was due primarily to the distribution of those

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Insert Table 7 about here

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under 40 years of age, $X^2(2) = 11.13$, $p < .01$. No other variables were significantly related to content.

Evaluation

The distribution by sex of evaluation categories is shown in Table 8.

Insert Table 8 about here

As can be seen from this table, men used more of the brief, cryptic descriptions, while women described their life events in fairly straightforward terms or with affective states predominant, $X^2(3) = 17.37$, $p < .001$. Among men, occupational status was related to evaluative quality, with professional men applying affective statements to their life events, (30.44% compared to 0 non-professionals). Non-professionals described their life drawings in brief, cryptic terms (68.18% compared to 8.69% professionals). More professionals (39.13%) used

straightforward descriptions with some personal details added compared to non-professionals (13.64%). This distribution was significant, X^2 (3) = 20.02, $p < .001$. Among women, it appeared that the greater tendency to use straightforward descriptions noted in the comparison with men was accounted for by the over 40 group using this form (65.22%) more than the under 40 group (25.00%). Women under 40 were more likely to use affective descriptions (50.00%) compared to women over 40 (8.70%), X^2 (2) = 10.27, $p < .01$ (the brief, cryptic category was not used by enough women to permit within-sex analysis).

Discussion

The general expectation that age would not be related to the dimensions of temporal orientation was supported by the present results. The social contextual variables related to the adult experiences of the men and women in the present sample appeared to have greater impact on their perception of time over the life course than their age. Indeed, age phases corresponding to those of the stage theorists were not observed, as approximately two-thirds of the present sample of over-40 year olds had no event markers after the late 20's.

Sex was related to each of the temporal orientation dimensions, either alone or in combination with occupational or work status. Temporal concept, as reflected in the shape of the life drawing, was found to be different among professional as compared to non-professional men. Professional men drew more segmented life drawings, corresponding to the spatial model of time. They also differentiated more phases in their lives (M = 6.54) than the non-professional (M = 4.54), t (45) = 3.03, $p < .01$. This was particularly true for professional men over 40 (M = 7.75) compared to non-professional men (M = 4.25) in that age group, $t(18) = 3.37$, $p < .01$. Thus, it appeared that professional

men perceived more discontinuities in their life histories than did non-professionals.

The three measures of temporal perspective did not yield results entirely in accord with the hypotheses, but were in a generally favorable direction. Men were found to be more future-oriented than women, and among the latter, work status differentiated among the present- and future-oriented. Working women, as predicted, scored in a direction similar to men, of both occupational levels. There was an age-by sex interaction in present versus past orientation as measured by timing of peak period (the relatively largest area on the life drawing). Age was negatively related to present orientation, but only for the men in the sample. Homemakers were somewhat more past-oriented than working women, but age did not relate to timing of peak period among women in general. The data on timing of marker events into the 30's, 40's, and 50's, among the older half of the respondents, strengthened the above findings, since sex differences and differences within the female sample were in the expected direction. Finally, mobility was related to timing of peak event among men. The fact that this relationship was not observed for women may have been due to the fact that after 18 years of age their mobility patterns were determined more by their husband's vocational needs rather than their own predispositions to move.

Content of significant life events also differed between the sexes in the expected direction, but only for those under 40 years of age. Although not significant, there appeared to be a tendency for women over 40 to emphasize work (64.29%) more than did women under 40 (28.57%). This within-sex difference for women was probably responsible for the lack of sex differences in the over-40 group.

Men and women also differed in the general way in which they described their

life events. However, this sex difference varied in nature according to age among women and work occupational status among men. Women under 40 tended to use affective descriptions, as did professional-level men. The life event descriptions of women over 40 corresponded to a relatively non-evaluative, but sequential ordering of events without much personal elaboration. Non-professional men used terse but relatively personal, even idiosyncratic, descriptions of their life events. Elaboration with personal details was a style also adopted more frequently by professional level men than non-professionals.

Some potential limitations of the present study deserve attention before a more general discussion of the implications of the findings. First, the method of obtaining the life drawings may have biased respondents into linear depictions of their life course. The fact that the reference line was horizontal across the bottom of the page may have induced a set to orient the drawing in a parallel direction. This bias was, it appears, at least somewhat offset by the instructions to mark the drawing off into segments to represent areas of the life course. There was a two-to-one ratio in the total sample of block to linear representations, indicating a bias in favor of the instructions compared to the visual format of the paper on which respondents were to construct their drawings. There is no reason to expect that the positive findings that were obtained on shape of the life drawing were affected by this bias. It is more probable that this bias obscured other differences that might have appeared had the instructions been more neutral about segmentation.

It is also possible that the instructions to "draw your life" may have led respondents into believing that they were actually to draw pictures. The results provide a basis for rejecting this interpretation, since only 14% of the sample elaborated their life drawings with illustrations. An unexpected and

interesting sex difference was found to exist in the tendency to use pictures. Three times as many women as men (21 to 7 percent) drew pictures. These pictures, with the exception of one Navy technician in the male sample who drew airplanes, were all of people. The women's were of other people, all family members, while the drawings by the two men were of themselves. Thus, the instructions to "draw" did not appear to lead respondents into a particular set. Those who deviated from the more typical verbal elaborations of the lines or segments used by the majority of respondents may have been expressing some particularly unique tendency to view their lives in pictorial terms.

The data on evaluation provided some novel and intriguing data on the tendency for respondents to apply affective judgments to their life events. Respondents were almost equally divided between those who described their life events in a non-elaborated fashion and those who added personal details, including strongly affective statements. It is possible that the tendency to provide such details is a function of verbal ability, and perhaps educational attainment. This interpretation might explain the tendency of non-professional men to use brief, non-decipherable descriptions and women over 40 to apply fairly standard phraseology to their life events. Comparison of these groups on educational level showed that professional ($\underline{M}$ = 12.17) and non-professional ($\underline{M}$ = 16.17) men did differ in years of education, $t(45) = 6.64$, $p < .001$, but over- ($\underline{M}$ = 13.17) and under- ($\underline{M}$ = 13.96) 40 women did not, $\underline{t}(45) = 1.25$, ns. The difference in educational level for men would be expected, by virtue of their differential occupational attainments, so that the difference in method of describing life events in the case of men may be spurious. The question that remains unanswerable by the present data, however, is whether the lower status men actually conceptualize their life events differently from their counterparts,

or whether the differences merely reflect verbal expression ability related to education. Among women, the question appears to be simpler, since there is no educational level confound. Nevertheless, it still is not apparent whether differences in expression in the life drawing are the result of different ways of internally structuring life events.

The present results have provided for identification of social contextual factors not previously studied that appear promising for future research. Two of these require particular emphasis, one for women and one for men. For women, the heretofore neglected distinction between being a homemaker as opposed to working outside the home for pay clearly appears related to temporal orientation. Working women are more likely to be future-oriented than present-oriented, and they are more likely to focus upon and emphasize the present rather than the past, in comparison to homemakers. The significant events and periods that demarcate their lives show clearly different patterns, and the content of peak periods having the greatest significance in their lives tends to differ. There are clear theoretical reasons for expecting a difference between women who are engaged in public life and who experience both the problems and rewards of economically compensated activity, and homemakers whose tasks are primarily domestic. Whatever value one attaches to the tasks of mothering and homemaking, the domestic sphere does appear to involve, for many women, a sense of exclusion from public life, and perhaps more than in the case of the working women, a tendency to recall a time of more activity outside the home. Such activity might include earlier work or school experiences. It is also likely to include the period of dating before marriage, which anecdotal evidence, at least, suggests is a time period valued because of its link with romance and excitement (e.g., Glen Campbell's popular song "The Dreams of the Everyday Housewife").

This period prior to marriage might also be remembered because it was a time when a woman might have made decisions that would have led to a different kind of life than the one presently structured. A great deal of women's studies literature emphasizes the subjective effects of the homemaker position that would be consistent with this interpretation.

A second promising variable that, to the knowledge of the present authors has not been examined in relation to temporal orientation, is salient primarily for men: geographic mobility. There was a strong association of mobility in adulthood and a present peak period for young adult men. This remained strong even when controls for occupational prestige were introduced, and supports the hypothesis that mobility tends to gear one into the present, while stability encourages one to identify more with the past. The present experience of one who moves is situated in a location whose recent history is congruent with his own biography. Stability means that everyday life is carried on in a spatial context that also provides an important element of memory content; the context of the present is also the context of the remembered past. In contrast, the primary organizer of the traditional female life structure is relational. Ongoing familial relations, which have their own history and remembered past, may have a similar function for women that the experience of being geographically anchored has for men.

As noted at the outset, chronological age had no predictive power in explaining differences among the adults in our sample in temporal orientation. Consistently, apparent associations between age and temporal orientation disappeared in the analyses when additional controls were introduced. Although age was correlated in our sample and is in the population with operative factors such as mobility, socioeconomic status, and female occupational status, age

itself does not appear to have an effect on temporal orientation, at least prior to 60 years of age. This finding is consistent with other research suggesting that the social structure of roles, relationships, and resources through legal and normative mechanisms of age-grading profoundly affect psychological orientation (Neugarten and Datan, 1973; Riley, 1971). In contrast to Birren's (1959, p. 8) assertion that "chronological age is one of the most useful single items of information about an individual if not the most useful," the present findings suggest that little matters less than chronological age when its social contextual correlates are controlled. The implications of these findings for stage theories of adult development based on age categorization systems are clear. Explication of the factors that influence the adult life course must include the much more complex but relevant factors derived from the social context in which life events unfold.

Footnote

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Reference Note

1. Hollingshead, A.B. A four factor index of social status. Unpublished manuscript, Yale University.

References

Bengston, V.L., Kasschau, P.L., and Ragan, P.K. The impact of social structure on aging individuals. In J.E. Birrin and K. W. Schaie (Eds.) Handbook of the psychology of aging. Von Nostrand Reinhold, New York, 1977.

Berger, P.L. and Luckmann, T. The social construction of reality. Doubleday, New York, 1966.

Bourque, L.B. and Back, K.W. Life graphs and life events. Journal of Gerontology, 32, 669-674, 1977.

Brim, O.G. and Forer, R. A note on the relation of values and social structure to life planning. Sociometry, 19, 54-68, 1956.

Chiriboga, D.A. Evaluated time: A life course perspective. Journal of Gerontology, 33, 388-393, 1978.

Cottle, T.J. Perceiving time: A psychological investigation with men and women. Wiley, 1976.

Cottle, T.J. and Pleck, J.H. Linear estimations of temporal extension: The effect of age, sex, and social class. Journal of Projective Techniques, 33, 81-93, 1969.

Frenkel, Brunswick, E. Studies in biographical psychology. Character and Personality, 5, 1-34, 1936.

Gould, R.L. Transformations: Growth and change in adult life. Simon & Schuster, New York, 1978.

Greene, J.E. and Roberts, A.H. Time orientation and social class: A correction. Journal of Abnormal and Social Psychology, 62, 141, 1961.

Heckhausen, H. The anatomy of achievement motivation. Academic Press, New York, 1967.

Hendricks, C.D. and Hendricks, J. Concepts of time and temporal construction among the aged, with implications for research. In J.F. Gubrium (Ed.) Time, roles, and self in old age. Human Sciences Press, New York, 1976.

Judson, A.J. and Tuttle, C.E. Time perspective and social class. Perceptual and Motor Skills, 23, 1074, 1966.

Koenig, F., Swanson, W., and Harter, C. Future orientation and social class. Perceptual and Motor Skills, 51, 927-930, 1980.

Kohn, M.L. and Schooler, C. Occupational experience and psychological functioning: An assessment of reciprocal effects. American Sociological Review, 38, 97-118, 1973.

Kohn, M.L. and Schooler, C. The reciprocal effects of the substantive complexity of work and intellectual flexibility: A longitudinal assessment. American Journal of Sociology, 84, 24-52, 1978.

LeShan, L.L. Time orientation and social class. Journal of Abnormal and Social Psychology, 47, 589-592, 1952.

Levinson, D.J., Darrow, C.N., Klein, E.B., Levinson, M.H., and McKee, B. The seasons of a man's life. Alfred A. Knopf, New York, 1978.

Lowenthal, M.F., Thrunher, M., and Chiriboga, D. Four stages of life. Jossey-Bass, San Francisco, 1975.

Masuda, M. and Holmes, T.H. Life events: Perceptions and frequencies. Psychosomatic Medicine, 40, 236-261, 1978.

Miller, J., Schooler, C., Kohn, M.L., and Miller, K.A. Women and work: The psychological effects of occupational conditions. American Journal of Sociology, 85, 66-94, 1979 (July).

Morganti, J.B., Heiman, G.W., Licht, D., and Nehrke, M.F. Correlates of time estimation in elderly domiciliary residents. Paper presented at the 1981 Eastern Psychological Association Meeting, New York City, April 1981.

Neugarten, B.L. and Datan, N. Sociological perspectives on the life cycle. In P.B. Baltes & K.W. Schair (Eds.) Life-span developmental psychology: Personality and socialization. Academic Press, New York, 1973.

Neugarten, B.L., Moore, J.W., and Lowe, J.C. Age norms, age constraints, and adult socialization. In B.L. Neugarten (Ed.) Middle age and aging. University of Chicago Press, Chicago, 1968.

Riley, M.W. Social gerontology and the age stratification of society. The Gerontologist, 11, (No. 1, Part 1), 1971.

Salthouse, T.A., Wright, R., and Ellis, C.L. Adult age and the rate of an internal clock. Journal of Gerontology, 34, 53-57, 1979.

Sanguiliano, I. In her time. Morrow Quill Paperbacks, New York, 1980.

Schmidt, R.W., Lamm, H., and Trommsdorff, G. Social class and sex as determinants of future orientation (time perspective) in adults. European Journal of Social Psychology, 18, 71-98, 1978.

Vaillant, G. Adaptation to life, Little, Brown & Co., Boston, 1977.

Whitbourne, S.K., & Weinstock, C.S. Adult development: The differentiation of experience. Holt, Rinehart & Winston, New York, 1979.

Whitrow, G.J. The nature of time. Holt, Rinehart & Winston, New York, 1972.

Table 1

Shape of Life Drawing by Occupational Status among Men

	Non-Professional	Professional
Block	11(47.83%)	18(75.00%)
Linear	12(52.17%)	6(25.00%)

Table 2

Time Orientation of Peak Period by Age

	Under 40	40 and Over
Present	23(46.94%)	8(18.18)
Past	26(53.06%)	36(81.82)

Table 3

Time Orientation of Peak Period by Mobility after Age 18 among Men

	0-4 Moves	5 or More Moves
Present	7(24.14)	10(55.56%)
Past	22(75.86)	8(44.44%)

Table 4

Time Orientation of Peak Period by Work Status among Women

	Workers	Homemakers
Present	10 (38.46%)	4 (25.00%)
Past	16 (61.54%)	10 (75.00%)

Table 5

Span of Life Drawing by Sex

	Men	Women
Present	22(46.81)	33(71.74%)
Future	25(53.19)	13(18.26%)

Table 6

Marker Events after Age 30 by Work Status in Respondents over 40 Years Old

	Men	Women
Markers end at 30	3 (15.00%)	11 (45.83%)
Markers extend past 30	17 (85.00)	13 (54.17%)

Table 7

Content of Peak Period by Sex

	Men	Women
Family	9(21.43%)	24(57.14%)
Work or School	20(47.62%)	13(30.95%)
Self	13(30.95%)	5(11.91%)

Table 8

Evaluation of Life Events by Sex

	Men	Women
Straightforward event description	9 (20.00%)	20 (44.44%)
Some personal details added to straightforward event description	12 (26.67%)	11 (24.44%)
Affective states predominant	7 (15.56%)	12 (26.67%)
Brief, cryptic, non-specific	17 (37.78%)	2 (4.44%)